IN THE CLAIMS:

1.   (Currently amended) A method for collecting connection information for a computer system having a server, at least one device controller coupled to said server by a first communication channel, and a client coupled in communication with said server, said method comprising steps of:

(a)   querying said server to identify all host bus adapters coupled thereto;

(b)   querying each host bus adapter to identify all device controllers attached on said communication channel;

(c)   issuing a <u>SCSI</u> read connection information command to said device controller and returning the connection results identifying [said communication channel] <u>a first WWN of at least one of the host bus adapters and a second WWN of at least one of the device controllers</u>; and

(d)   storing the returned connection results in a data structure.

2.   (Previously amended) The method in Claim 1, wherein said connection results include a host bus adapter identifier corresponding to said server, and at least one device controller identifier corresponding to a device controller coupled to said host bus adapter.

3.   (Original) The method in Claim 1, wherein said data structure comprises a server identification table and at least one host bus adapter connection table associated with a particular host bus adapter.

4.   (Original) The method in Claim 3, wherein each said server identification table stores at least one server identifier, and each host bus adapter is linked to at least one server table by a pointer and stores at least one device controller identifier.

5.   (Original) The method in Claim 4, wherein said host bus adapter identifier comprises a first WWN and said device controller identifier comprises a second WWN.

6.   (Original) The method in Claim 1, wherein said host bus adapters comprise fibre channel arbitrated loop bus adapters.

7.   (Original) The method in Claim 1, wherein said communication channel comprises a Fiber Channel arbitrated loop channel.

8.   (Original) The method in Claim 1, wherein said device controllers comprise storage device array controllers.

9.   (Original) The method in Claim 1, wherein said device controllers comprise RAID storage array controllers.

10.   (Original) The method in Claim 1, wherein said data structure comprises a host bus adapter connection table.

11.   (Original) The method in Claim 1, wherein said computer system comprises a distributed computer system having a plurality of servers and a plurality of storage subsystems.

12.   (Original) The method in Claim 1, wherein said computer network includes a storage area network (SAN).

13.   (Original) The method in Claim 3, wherein said storage area network includes a RAID.

14.   (Original) The method in Claim 1, wherein said device comprise multiple storage subsystems connected to multiple server systems.

15.   (Original) The method in Claim 12, wherein said method further comprises the step of sending messages using a messaging protocol that permits a storage configuration tool to identify storage subsystems on said storage area network.

16.   (Original) The method in Claim 15, wherein said messaging protocol is substantially independent of the operating system and channel type.

17.   (Original) The method in Claim 1, wherein said host bus adapters comprise Fibre Channel arbitrated loop bus adapters and said read connection information command comprises a Read Fibre Connection Information command.

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18.   (Original) The method in Claim 17, wherein said Read Fibre Connection Information command returns a fibre channel port WWN of a device controller.

19.   (Original) The method in Claim 18, wherein said Read Fibre Connection Information command returns a host bus adapter WWN of a fibre channel host bus adapter to which an array storage device is connected.

20.   (Original) The method in Claim 1 wherein said connection results are returned to said client.

21.   (Original) The method in Claim 1, wherein said connection results identify all connections between a device controller and a server to said client.

22.   (Original) The method in Claim 1, wherein said server comprises an configuration server application software computer program executing on a server computer, and said client comprises a configuration client application software computer program executing on a computer selected from the group consisting of a client computer and said server computer.

23.   (Original) The method in Claim 1, wherein said server computer includes a plurality of host bus adapters and said disk array controller includes a plurality of Fibre Channel Ports, each of these host bus adapters and fibre channel ports being associated with a WWN.

24.   (Original) The method in Claim 22, wherein said configuration server application software computer program allows specific configuration and control commands to be sent by the server computer to the storage array controller from the configuration client.

25.   (Original) The method in Claim 22, wherein said storage array controller comprises a Fibre Channel compliant RAID controller.

26.   (Original) The method in Claim 22, wherein said configuration server application software computer program allows information from said device controller to be sent to the configuration client.

27.   (Original) The method in Claim 1, further comprising performing said steps (a)-(d) for each of a plurality of said servers and for each host bus adapter coupled to each said server.

28.   (Original) The method in Claim 1, wherein at least one of said steps (a)-(d) are performed by said server upon instruction from said configuration client.

29.   (Withdrawn)

30.   (Withdrawn)

31.   (Withdrawn)

32. (Currently amended) A computer program product for use in conjunction with a computer system having a server, at least one device controller coupled to said server by a first communication channel, and a client coupled in communication with said server, the computer program product comprising a computer readable storage medium and a computer program mechanism embedded therein, the computer program mechanism, comprising:

a program module that directs computer system components to function in a specified manner including collecting connection information for said computer system, the program module including instructions for:

(a) querying said server to identify all host bus adapters coupled thereto;

(b) querying each host bus adapter to identify all device controllers attached on said communication channel;

(c) issuing a SCSI read connection information command to said device controller and returning the connection results identifying [said communication channel] a first WWN of at least one of the host bus adapters and a second WWN of at least one of the device controllers; and

(d) storing the returned connection results in a data structure.

33. (Withdrawn)

34. (Withdrawn)

35.   (Withdrawn)

36.   (Currently Amended) A system for collecting connection information for a network computer system comprising:

a server;

at least one device controller coupled to said server by a first communication channel;

a client coupled in communication with said server;

means querying said server to identify all host bus adapters coupled thereto;

means querying each host bus adapter to identify all device controllers attached on said communication channel;

means issuing a <u>SCSI</u> read connection information command to said device controller and returning the connection results determined by said command including identifying [said communication channel] <u>a first WWN of at least one of the host bus adapters and a second WWN of at least one of the device controllers</u>; and

means storing the returned connection results in a data structure.

37.   (Previously added) The system in Claim 36, wherein said host bus adapters comprise Fibre Channel arbitrated loop bus adapters and said read connection information command comprises a Read Fibre Connection Information command.

38.   (Previously added) The system in Claim 37, wherein said Read Fibre Connection Information command returns a fibre channel port WWN of a device controller.

39.   (Previously added) The system in Claim 38, wherein said Read Fibre Connection Information command returns a host bus adapter WWN of a fibre channel host bus adapter to which an array storage device is connected.

40.   (Previously added) The system in Claim 36, wherein said a read connection information command comprises: instructions for collecting connecting information for components coupled to said server, said components selected from the group consisting of bus adapters, device controllers, and devices coupled to said device controllers; and has a command structure including:

(i) a direct command operation code field identifying the command to be executed; and

(ii) an allocation length field indicating the number of bytes the initiator has allocated for information returned in connection with execution of said command.

41.   (Previously added) The read connection information command in Claim 40, wherein said read connection information command returns connection information selected from the group consisting of an identifier of an initiator issuing the command, an identifier of the controller receiving the command, an identifier of the partner controller, and combinations thereof.

42.   (Previously added) The read connection information command in Claim 40, wherein said identifier of the Initiator issuing the command comprises a WWN of the Initiator issuing the command, said identifier of the controller receiving the command comprises a WWN of the

controller receiving the command, and said identifier of the partner controller comprises a WWN of the partner controller.

43.   (Previously added) The system in Claim 36, wherein said connection results include a server identifier, a host bus adapter identifier corresponding to said server, and at least one device controller identifier corresponding to a device controller coupled to said host bus adapter.

44.   (Previously added) The system in Claim 36, wherein said data structure comprises a server identification table and at least one host bus adapter connection table associated with a particular host bus adapter.

45.   (Previously added) The system in Claim 44, wherein each said server identification table stores at least one server identifier, and each host bus adapter is linked to at least one server table by a pointer and stores at least one device controller identifier.

46.   (Previously added) The system in Claim 36, wherein:

said means querying said server to identify all host bus adapters coupled thereto includes at least a first computer program instruction;

said means querying each host bus adapter to identify all device controllers attached on said communication channel includes at least a second computer program instruction;

said means issuing a read connection information command to said device controller and returning the connection results determined by said command including identifying all devices coupled to said device controller includes at least a third computer program instruction; and

said means storing the returned connection results in a data structure includes at least a fourth computer program instruction.

47. (New)   A method for collecting connection information in a system comprising a disk array controller coupled to a configuration server, the configuration server having a host bus adapter, the method comprising:

generating a SCSI read fibre connection information command in the configuration server;

issuing the SCSI read fibre connection information command to the disk array controller through the host bus adapter; and

receiving a first WWN of the host bus adapter and a second WWN of the disk array controller responsive to the SCSI read fibre connection information command.